REMARKS/ARGUMENTS

The rejections presented in the Office action dated November 19, 2004 have been considered. Claims 1-33 remain pending in the application. The Applicant acknowledges the allowance of Claims 20-33, and the conditional allowance of Claims 7, 11 and 15, and thanks the Examiner for favorable consideration of these claims. Reconsideration of the remaining claims and allowance of the application in view of the present response is respectfully requested.

Claims 1-4, 9, 13, 14, and 16-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ramakrishnan* (U.S. Patent No. 6,711,128) in view of "A Comparison of Mechanisms for Improving TCP Performance Wireless Links" by *Balakrishnan et al.* (hereinafter *Balakrishnan*) and in view of "Delay performance of the new explicit loss notification TCP technique for wireless networks" by *Ding et al.* (hereinafter *Ding*). The Applicant respectfully traverses the rejection.

To establish *prima facie* obviousness based on a combination of references, three basic criteria must be met, as is set forth in M.P.E.P., §2143:

  1) There must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
  2) There must be a reasonable expectation of success; and
  3) The prior art references must teach or suggest all of the claim limitations.

Thus, the combination of *Ramakrishnan, Balakrishnan* and *Ding* must teach or suggest all of the claim limitations; there must be some suggestion or motivation to combine these three references; and there must be a reasonable expectation of success.

The Claims subject to this rejection include one independent claim, namely Claim 1. While various portions of *Ramakrishnan, Balakrishnan* and *Ding* are characterized in the rejection, it is respectfully submitted that neither these itemized reference features, nor a combination of the cited references generally, teach or suggest all of the claim limitations of Claim 1. For at least this reason, it is respectfully submitted that *prima facie* obviousness is not established for independent Claim 1.

For example, Claim 1 recites that a loss notification signal is sent from the network node to the sending module in response to identification of the non-congestion-based packet

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loss. The Examiner acknowledges that "*Ramakrishnan* is silent on sending a loss notification signal," and recites *Balakrishnan* as teaching this claimed feature. The Applicant respectfully disagrees that *Balakrishnan* teaches sending a loss notification signal from the network node to the sending module as claimed. On page 3 of the Office Action, a number of characterizations of *Balakrishnan* are detailed; however it is respectfully submitted that none of these characterizations in *Balakrishnan*, nor the *Balakrishnan* as a whole, teach the claimed feature of sending a loss notification signal from the network node to the sending module in response to identification of the non-congestion-based packet loss. For example, the Examiner indicates that *Balakrishnan* teaches that a "base station generates ELN message to sender," however this does not teach sending a loss notification signal from the network node that identified the non-congestion-based packet loss. Thus, even assuming *arguendo* that *Ramakrishnan* and *Balakrishnan* are properly combined, the combination would not teach identifying the non-congestion-based packet loss at a network node, and sending a loss notification signal from that network node to the sending module in response to identification of the non-congestion-based packet loss. *Ding* does not remedy this deficiency, as the Examiner notes that *Ding* concerns retransmitting lost packets rather than sending any type of loss notification signal from the network node to the sending module. Therefore, even without considering whether *Ramakrishnan*, *Balakrishnan* and *Ding* are properly combined, the combination fails to teach or suggest at least sending a loss notification signal from the network node to the sending module as claimed. Because *prima facie* obviousness requires that the combination of references teach or suggest all claim elements, and because at least this claimed feature is not taught nor suggested by the cited combination of references, the Applicant respectfully submits that *prima facie* obviousness is not established, and the combination fails to render Claim 1 obvious.

Further, it is respectfully submitted that the rejection of Claim 1 does not address the claimed recitations involving *verifying* the non-congestion-based packet loss at the sending module, and performing a first loss recovery relative to a second loss recovery if the non-congestion-based packet loss is *verified*. As set forth in one embodiment of Applicant's Specification, the loss notification signal(s) may be sent from any number of network elements in the network and thus may be untrustworthy, whereby the loss notification signals provided to the sender are accordingly used to "advise" the sender of the condition, *subject to verification*

(see, *e.g.*, page 9, lines 16-23). It is respectfully submitted that the combination of *Ramakrishnan*, *Balakrishnan* and *Ding* fail to teach this verification feature and its use in determining the performance of differing loss recovery procedures as set forth in Claim 1. For at least these additional reasons, the combination of *Ramakrishnan*, *Balakrishnan* and *Ding* do not teach or suggest all the claim limitations as required by M.P.E.P. § 2143, and Claim 1 is therefore not rendered obvious by the cited combination of references. Reconsideration of the rejection to Claim 1 is respectfully solicited.

Dependent Claims 2, 4, 13, 14, 16, 17 and 19, which are dependent from independent Claim 1, were also rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of *Ramakrishnan*, *Balakrishnan* and *Ding*. While Applicant does not acquiesce with any particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent Claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. "If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious." M.P.E.P. §2143.03; *citing In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, dependent Claims 2, 4, 13, 14, 16, 17 and 19 are also allowable over the cited combination of references.

Claims 5, 6, 8, 10 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ramakrishnan* in view of *Balakrishnan* and *Ding* as applied to Claims 1-4, and further in view of *Chao et al.* (U.S. Patent No. 6,370,144) *(*hereinafter *Chao)*. It is noted that the merits of the rejection of Claims 5, 6, 8, 10 and 12 depends on the merits of the rejection of at least independent Claim 1, as the Examiner has relied upon the combination of *Ramakrishnan*, *Balakrishnan* and *Ding* as rendering obvious Claims 1-4, and Claims 5, 6, 8, 10 and 12 are dependent from one or more of Claims 1-4. The Examiner does not rely on *Chao* as teaching or suggesting the features recited in Claims 1-4, but rather cites *Chao* as teaching identifying a transport protocol in a next field. *Chao* does not remedy the deficiencies of Claims 1-4, and because the combination of *Ramakrishnan*, *Balakrishnan* and *Ding* fail to teach all the limitations of Claims 1-4, and because *Chao* does not remedy those deficiencies, the combination of *Ramakrishnan*, *Balakrishnan*, *Ding* and *Chao* fail to teach or suggest all of the

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claim limitations of Claims 1-4. Claims 5, 6, 8, 10 and 12 are dependent from Claims 1-4, and therefore are also not rendered obvious by the combination.

In addition, it is respectfully submitted that although a lengthy characterization of the *Ramakrishnan, Balakrishnan, Ding* and *Chao* references are recited in the Office Action, none appear to address at least *verifying* the non-congestion based packet loss. For this additional reason, the four-way combination of *Ramakrishnan, Balakrishnan, Ding* and *Chao* fails to teach or suggest all the limitations of the rejected claims.

Furthermore, the relied-upon figures/description of *Chao* merely identify that a "next header" field is present. This does not, however, teach or suggest identifying a transport layer protocol in a next header field *within the data embedded in the signaling protocol packet.* *Chao* does not allude to any fields within data that are embedded in the signaling protocol packet. In other words, the next header field described in *Chao* is in the header itself, and not within data embedded in a signaling protocol (or any other) packet. For at least this additional reason, *prima facie* obviousness has not been established for Claims 5, 6, 8, 10 and 12.

As set forth in M.P.E.P § 2143, *prima facie* obviousness may be established when 1) the cited combination of references teach or suggest all the claim limitations; 2) there is a reasonable expectation of success; and 3) evidence of the requisite suggestion or motivation to combine the reference teachings is provided. A *prima facie* case of obviousness is not established if any one or more of these requirements is not met. Because the combinations of references do not teach or suggest all the claim limitations in the currently pending claims, it is respectfully submitted that *prima facie* obviousness is not established for these claims. However, the Applicants do not acquiesce with the stated motivations to combine the references cited in the Office Action. The reason, suggestion, or motivation to combine may be found explicitly or implicitly: 1) in the prior art references themselves; 2) in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem. Ruiz v. A.B. Chance Co., 234 F.3d 654, 665 (Fed. Cir. 2000). The Applicants do not acquiesce that the requisite motivation to combine the references arises from the references themselves, the knowledge that the references are of special interest or importance in the field, or from the
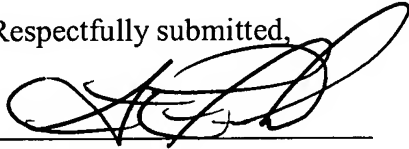
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nature of the problem to be solved which would lead an inventor to look to the references. For example, *Chao* relates to a shaper used to find the first memory location of a calendar queue with the lowest time stamp, and this "searching" function has no relation to (for example) the lossy links teaching of *Ramakrishnan*. Thus, while the Applicants respectfully submit that *prima facie* obviousness is not established because all claim limitations are not taught by the cited combinations, the Applicant does not need to reach the issues of requisite motivation to combine references or reasonable expectation of success. The Applicant does not acquiesce that the requisite motivation to combine these references exists, or that a reasonable expectation of success exists. The Applicant reserves the right to further address these other elements of a *prima facie* case of obviousness if and when appropriate to do so.

If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact him at 651-686-6633 (x110) to discuss any issues related to this case.

Respectfully submitted,

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